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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,309	02/18/2004	Floyd Backes	160-019	4854

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EXAMINER

EWART, JAMES D

ART UNIT PAPER NUMBER

2683

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,309	Applicant(s) BACKES ET AL.	
	Examiner James D. Ewart	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application Nos. 10/781,228, 10/780,844, 10/781,192, 10/781,147 and 10/781,259. Although the conflicting claims are not identical, they are not patentably distinct from each other because either recite identical or substantially the same limitations with minor alterations such as method or apparatus claims instead of the current computer program claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

2. Claim 2 is objected to because of the following informalities: claim 2 states "The program product of claim 2" and should be "The program product of claim 1". Appropriate correction is required.

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3. Claim 3 is objected to because of the following informalities: claim 3 states "The program product of claim 3" and should be "The program product of claim 1". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claim 1 recites the limitation "the apparatus". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soomro et al. (US Patent Publication no. 2003/0002456) in view of Choi et al. (U.S. Patent Publication No. 2002/0188723).

Referring to claim 1, Soomro et al teaches a program product comprising a computer readable medium having embodied therein a computer program for storing data, the computer program for use by an access point in a wireless networking communications environment, the computer program comprising: logic for scanning a plurality of radio frequency channels during a scan interval (Figure 5); Logic for receiving messages from other access points on the plurality

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of radio frequency channels during the scan interval (0025 and 0029); logic for maintaining a channel map having an entry for each of the plurality of radio frequency channels (0025, 0036 and 0039), and if one or more messages was received on a channel, the corresponding entry further including an AP-ID for at least one of the access points that sent a message on the channel (Figure 2; DFS owner); logic for transmitting messages on the selected channel during a claim interval (0008 and 0025); logic for receiving messages from other access points on the selected channel during the claim interval (0008, 0025 and 0027); logic for ascertaining whether the apparatus should commence communications with other devices on the selected channel based upon characteristics of the messages received on the channel (0022, 0025 and Figure 5), but does not teach selecting a channel from the channel map. Choi et al. teaches selecting a channel from the channel map (Figure 3, 0009 and Figure 6B). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Soomro et al. with the teaching of Choi et al. of selecting a channel from the channel map to allow dynamic channel selection according to the criteria determined by the access point (0008). According to 0025, each AP sends out a beacon on the channel in use. Examiner equates the beacon in figure 2 with Applicant's message. When the AP scans the channels, it is well known that the AP tunes to the frequency being measured. An AP is a radio communication device with the logic for receiving a beacon message from another AP using the channel being measured. The AP scans the channels from the channel set at random and thus the current channel could be measured. Since the channel is selected based on a threshold there could be another AP using the same channel and thus the AP measuring could receive a beacon

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message from the AP on the same channel. Examiner equates the period interval of the beacon with the claim interval.

Referring to claim 2, Soomro et al teaches logic for maintaining a channel map and for each channel providing a corresponding AP-ID (Figure 2; DFS owner), but does not teach storing a power level for each channel and wherein the logic for selecting a channel from the channel map selects a channel having the lowest stored power level. Choi et al. teaches storing a power level for each channel and wherein the logic of selecting a channel from the channel map selects a channel having the lowest stored power level (0047). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Soomro et al with the teaching of Choi et al of storing a power level for each channel and wherein the logic of selecting a channel from the channel map selects a channel having the lowest stored power level to allow dynamic channel selection according to the criteria determined by the access point (0008).

Referring to claim 3, Soomro et al further teaches logic for ascertaining that the apparatus should commence communications with other wireless devices on the selected channel (0022, 0025 and Figure 5), but does not teach logic for evaluating the power level of a channel, and commencing communications with other wireless devices on the channel if the power level is below a threshold. Choi et al further teaches logic for evaluating the power level of a channel (0047), and commencing communications with other wireless devices on the channel (0047) if the power level is below a threshold (Claims 10 and 20). Therefore at the time the invention was

made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Soomro et al with the teaching of Choi et al of logic for evaluating the power level of a channel, and commencing communications with other wireless devices on the channel if the power level is below a threshold to allow dynamic channel selection according to the criteria determined by the access point (0008).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bender et al. U.S. Patent Publication No. 2003/0012174 discloses time multiplexed transmission scheme for a spread spectrum communication system.

Benveniste U.S. Patent Publication No. 2003/0086437 discloses overcoming neighborhood capture in wireless LANs.

Black et al. U.S. Patent Publication No. 2005/0013275 discloses assembly and associated method for facilitating channel frequency selection in a communication system utilizing dynamic frequency selection scheme.

Busch et al. U.S. Patent Publication No. 2002/0176437 discloses wireless LAN with channel swapping between DFS access points.

Cervello et al. U.S. Patent Publication No. 2002/0060995 discloses dynamic channel selection scheme for IEEE 802.11 WLANS.

Chuang et al. U.S. Patent No. 5,212,831 discloses method and apparatus for autonomous adaptive frequency assignment in TDMA portable radio systems.

Hansen et al. U.S. Patent Publication No. 2003/0040319 discloses dynamic frequency selection in a wireless communication network.

Jaszewski et al. U.S. Patent No. 5,933,420 discloses method and apparatus for assigning spectrum of a wireless local area network.

Malhotra et al. U.S. Patent Publication No. 2002/0181417 discloses wireless LAN with dynamic channel selection.

Mathur U.S. Patent No. 6,941,143 discloses automatic channel selection in a radio access network.

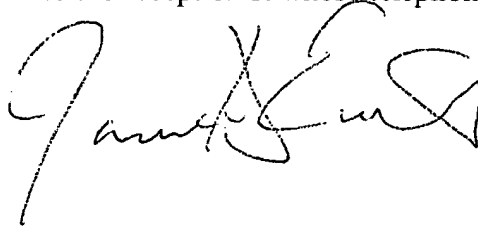
Ngo U.S. Patent Publication No. 2004/0037247 discloses frequency hopping in 5GHZ WLAN via dynamic frequency selection.

Steer et al. U.S. Patent Publication No. 2004/0157613 discloses self-selection of radio frequency channels to reduce co-channel and adjacent channel interference in a wireless distributed network.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Ewart whose telephone number is (571) 272-7864. The examiner can normally be reached on M-F 7am - 4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571)272-7872. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2600.

A handwritten signature in black ink, appearing to read 'James Ewart', with a stylized flourish at the end.

James Ewart
October 25, 2005

A handwritten signature in black ink, appearing to read 'William Trost', with a large checkmark-like flourish.

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600